Periscope.

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ANATOMY AND PHYSIOLOGY.

227. **ZUR HÄRTUNG DES CENTRALNERVENSYSTEMS IN SITU** (On the Hardening of the Central Nervous System in Situ). Pfister (Neurologisches Centralblatt, 17, 1898, p 643).

The author uses a five to ten per cent. solution of formaldehyde and injects it directly into the vertebral canal through the third and fourth intervertebral spaces. For the brain a like procedure through the superior orbital fissure is adopted. JELLIFFE.

228. **CONTRIBUTION A L'ÉTUDE DES LOCALISATIONS DES NOYAUX MOTEURS DANS LA MOELLE ÉPINIÈRE** (Contributions to the Study of the Localization of the Motor Nerves in the Spinal Cord). G. Marinesco (Revue Neurologique, 6, 1898, p. 463).

Marinesco, by complete or partial destruction of the motor nerves in cats and dogs and guinea pigs, presents the results of his studies in the following brief résumé:

(1) The cutting off of a spinal nerve from the spinal axis produces a condition of chromatolysis which is characteristic.

(2) Such a reaction can be utilized in order to determine the topographical position of the nucleus of origin of a motor nerve or set of nerves.

(3) As a rule each motor nerve arises from a main nucleus and an accessory nucleus, the main nucleus being plainly localized in the majority of cases. The median and cubital nerves prove exceptions to this general rule.

(4) Each motor spinal nerve arises from more than one medullary segment; two, three or even more nerve segments may contribute to its formation. JELLIFFE.

229. **ON THE STRUCTURAL ALTERATIONS OBSERVED IN NERVE CELLS.** W. B. Warrington (Journal of Physiology, 23, 1898, p. 112).

Using Held's method of staining the author experimented with cats and rabbits and comes to the following general summary in this excellent paper.

(1) Distinct and easily recognizable changes in nearly all the cells of a segment of the spinal cord are found on the side of the lesion after section of an anterior root.

(2) Similar but less marked changes follow division of the facial nerve, and still less distinct alteration after division of the oculomotorius nerve.

(3) The fate of such altered cells and the ultimate condition of the nucleus of origin are not yet definitely ascertained.

(4) The age and nature of the animal experimented on is a factor in determining the rapidity and degree of alteration met with in nerve cells.

JELLIFFE.

PATHOLOGY.

230. ZUR LEHRE VON DER SYRINGOMYELIE (On Syringomyelia). L. Minor (Zeitschft. f. Klin. Med. 34, 1898, p. 373).

The author presents a study of two cases of syringomyelia. The first case occurred in a one-year-old child, who from birth presented a number of anomalies of the nervous canal. It had spina bifida, meningocoele and hydrocephalus. Microscopic examination showed hydromyelia, syringomyelia with duplication of the central canal with well marked continuity of the two cavities. In the second case similar teratological developments were noted. This second case was in a twelve-year-old girl, who died of a compression myelitis due to an endothelioma. Microscopically there was found in the upper segments of the dorsal cord a marked dilatation of the central canal. In this case the syringomyelia could be demonstrated, by a study of the serial sections, to have originated from a cut-off portion of the central canal. The author, as a result of his studies on these two cases, emphasizes the Leyden embryological view as to the origin of syringomyelia.

JELLIFFE.

231. SULLE LESIONI DEL SISTEMA NERVOSA CENTRALE PRODOTTE DAL BACILLO ICTEROIDE. **Dott. A. Cesaris-Demel, Torino (Giornale della R. accedemia di medicina di Torino, Marzo, 1898).**

In the pathological laboratory of Professor Foa, of Turin, Dr. Cesaris-Demel experimented on the action of the bacillus of yellow fever as described by Sanarelli, on the central nervous system of dogs and rabbits, and came to the following conclusions:

(1) The icteroid bacillus produces in animals (dog and rabbit) important lesions in the cells of the central nervous system.

(2) These lesions affect principally: (a), the large and middle pyramidal cells of the cortex, which become swollen, lose their coloration and continuity of the chromophilic elements, arriving at a complete destruction of the cell; (b), the large cells of Purkinje which lose the coloration of the prolongations, and present a swelling of the basal part with intense chromatolysis and destruction of the cellular membrane; (c), the pyramidal cells of the anterior horns and of the oblongata, which present a conspicuous chromatolysis of a peripheral type.

(3) These lesions stand in relation to the gravity and extension and more or less susceptibility of the animal to the icteroid bacillus and the infection.

KRAUSS.

232. ZUR PATHOLOGIE DER EPILEPSIE (The Pathology of Epilepsy). N. Krainsky (Allg. Zeitsch. f. Psychiatrie, 54, 1897, p. 612).

From an extended series of examinations of the blood and urine the author comes to the general conclusion that the epileptic poison